

NEW DESCRIPTIONS

TWO NEW SPECIES OF *ASIALEYRODES* CORBETT (ALEYRODIDAE : HOMOPTERA) FROM INDIA¹

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(With two text-figures)

Corbett (1935) erected the genus *Asialeyrodes* for two species of whiteflies *Asialeyrodes lumpurensis* and *A. selangorensis* from Kuala Lumpur, the type species being *Asialeyrodes lumpurensis*. Takahashi (1942) added two species *A. euphorbiae* and *A. multipori* from Thailand and suggested a new combination *A. maesae* for *Pseudaleurolobus maesae* Takahashi from Taiwan, and in 1949 he added one more species *A. corbeti* from Riouw Islands.

Two species of aleyrodids collected from *Ixora brachiata* Roxb. (Rubiaceae) at Cherrapunjee, Meghalaya, on 21 October 1989 have been found to be new and are described in this paper.

Asialeyrodes meghalayensis sp. nov. (Fig. 1)

Pupal case: Dark brown, subcircular, a thick fringe of white wax around the margin, a clump of wax on the junction of longitudinal and transverse moulting suture area and a thin layer of powdery wax on dorsum; glued to the leaf surface; found singly or in groups on the lower surface of leaves; 0.98-1.17 mm long and 0.80-1.03 mm wide.

Margin: Crenate, 9 crenations in 0.1 mm; anterior and posterior marginal setae 15 and 22.5 μ long respectively. Thoracic and caudal tracheal pores present.

Dorsal surface: Four pairs of setae – cephalic and first abdominal setae 75 μ long each, eighth

abdominal setae 42.5 μ long and submarginal caudal setae 22.5 μ long. Submargin separated from dorsal disc by a complete furrow. Submargin with a row of pores and porettes near margin evident. Nine pairs of submarginal setae – one each on cephalus, mesothorax, metathorax, abdominal segments 1 and 4-8, 60-70 μ long. Longitudinal and transverse moulting sutures reaching submargin. Submedian pockets present on all segment sutures. A pair of depressions present on mesothorax and metathorax. Dorsum contains full of polygonal markings. Dorsal disc with sparsely distributed pores and porettes evident.

Vasiform orifice subcordate, wider than long, 37.5-40 μ wide and 30 μ long; operculum similarly shaped, 27.5 μ wide and 22.5 μ long, concealing the lingula. Lateral wall of vasiform orifice ridged. Caudal tracheal furrow 107.5-112.5 μ long with polygonal markings.

Ventral surface: Paired ventral abdominal setae 20-22.5 μ long and 37.5-40 μ apart. Thoracic and caudal tracheal folds with stipples evident.

Host: *Ixora brachiata* Roxb. (Rubiaceae)

Material examined: Holotype. *Ixora brachiata*, Cherrapunjee (Meghalaya), 21 October 1989, Coll. B.V. David.

Paratypes: Six pupal cases on slides bearing the same details as of holotype.

This species resembles *Asialeyrodes maesae* (Takahashi) in the colour and shape of the pupal case but differs in the presence of nine pairs of long submarginal setae, submedian depressions and the presence of caudal tracheal furrow with markings and thoracic and caudal tracheal folds with stipples.

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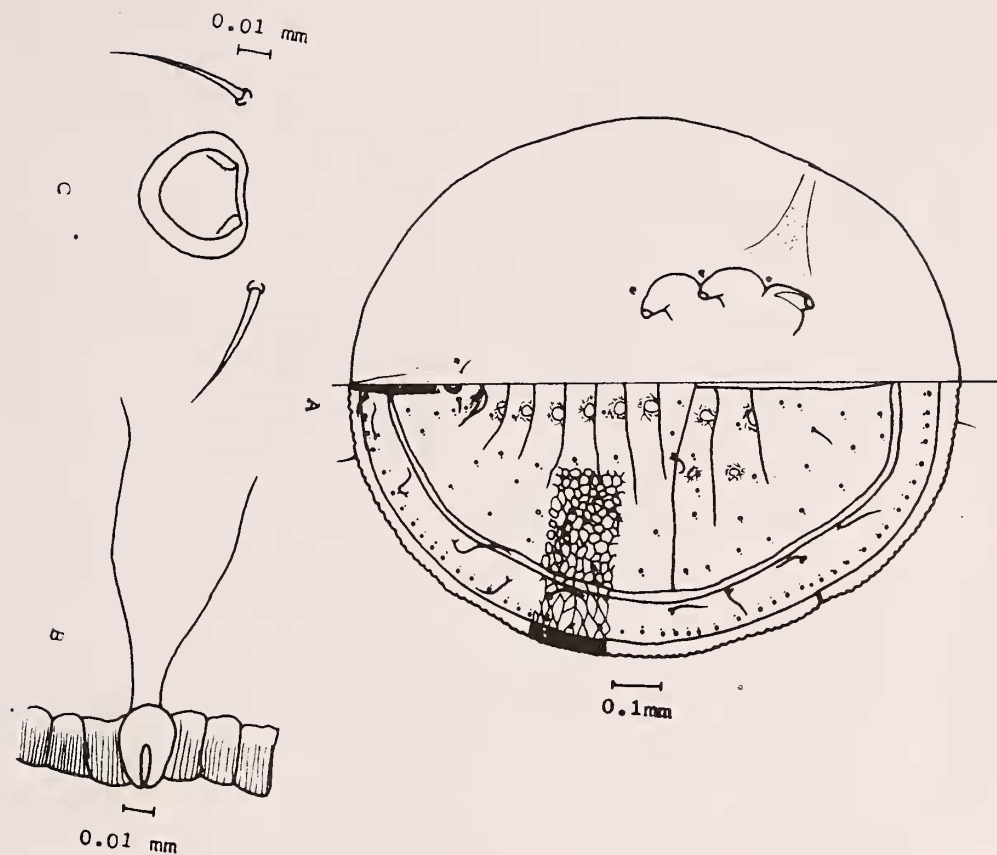


Fig. 1: *Asialeyrodes meghalayensis* sp. nov. A. Pupal case, B. Margin with thoracic tracheal pore, C. Vasiform orifice.

***Asialeyrodes papillatus* sp. nov. (Fig. 2)**

Pupal case: Milky white with a thin layer of wax over the submargin; subcircular, broadest at the transverse moulting suture area, 0.82 mm long and 0.71 mm wide; found on the lower surface of leaf.

Margin: Smooth; anterior and posterior marginal setae 12.5 μ long each; thoracic and caudal tracheal pores with chitinised rim.

Dorsal surface: Two pairs of setae – cephalic and eighth abdominal setae each 2.5 μ long; first abdominal and caudal setae absent. Submargin separated from dorsal disc by a broad and complete furrow. Submarginal furrow contains full of thick papilla-like (3-4 rows) structures. Longitudinal and transverse moulting sutures reaching submargin. Abdominal segment sutures 1-6 are marked by thin papilla-like structures. From the first abdominal segment suture a row of papilla-like structures extends to the cephalic

region. A row of four pairs of subdorsal setae near the submargin on abdominal segments 4-8, 2.5 μ long each. Dorsum contains full of polygonal markings. Submargin with a row of about 27 pairs of pores and porettes near the submarginal furrow and dorsal disc with about 44 pairs of pores and porettes – 20 on the cephalothorax and 24 on the abdomen, sparsely distributed.

Vasiform orifice subcircular, wider than long, 40 μ wide and 25 μ long; operculum similarly shaped, filling the orifice, concealing the lingula. Lateral wall of vasiform orifice ridged. Caudal tracheal furrow long, 87.5 μ with small dotted markings. Thoracic tracheal furrow slightly discernible.

Ventral surface: Paired ventral abdominal setae 5 μ long and 35 μ apart. Thoracic tracheal folds distinct, whereas caudal tracheal fold indistinct. Round markings on dorsal disc evident. A minute seta at the base of each mesothoracic and

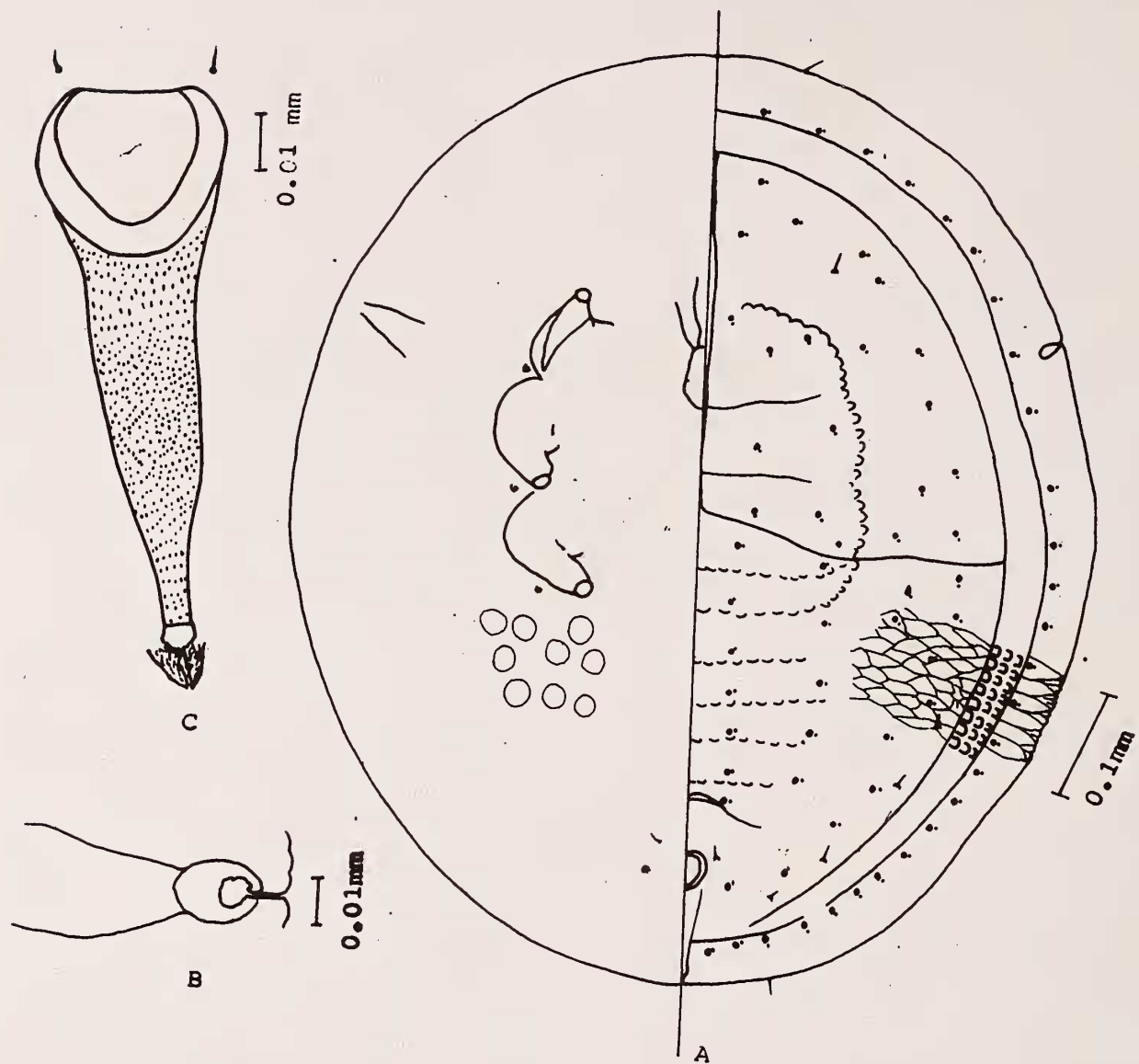


Fig. 2: *Asialeyrodes papillatus* sp. nov. A. Pupal case, B. Margin with thoracic tracheal pore, C. Vasiform orifice with caudal tracheal furrow.

metathoracic leg 3.75μ long.

Host: *Ixora brachiata* Roxb. (Rubiaceae)

Material examined: Holotype. *Ixora brachiata*, Cherrapunjee (Meghalaya state), 21 October 1989, Coll. B.V. David.

This species differs from all the other known species of *Asialeyrodes* in the presence of papilla-like structures in the submarginal furrow.

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